

THE WAVE



The newsletter publication of the International Microwave Power Institute

July 2018



Record Attendance at IMPI's 52nd Annual Microwave Power Symposium

One hundred and thirty attendees, from 16 countries, gathered in Long Beach, California for the 52nd Annual Microwave Power Symposium (IMPI 52) the last week of June. This was the largest Symposia in the past decade.

IMPI 52 featured 65 presentations (keynote, oral, poster and panel) on a range of topics including: Microwave Chemistry, Solid State, Novel Applications, Food & Agriculture, Industrial Processing, Modeling, Microwave Packaging and more.

15 students competed in the Student Competition. Best Oral Presentation went to Hermine Tertrais (Ecole Centrale de Nantes, France); Best Poster Presentation went to Chuting Gong (Shanghai Jiao Tong University, China). Honorable Mention in the Oral Presentation category went to Candice Ellison (Louisiana State University, USA) and Humayun Kabir (University of Melbourne, Australia). Students winners and honorable mentions won a cash prize, a certificate and a one year student membership to IMPI.

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PRESIDENT'S MESSAGE

The Oxford Dictionary's word of the year in 2016 was "post-truth", a condition where facts are less influential in shaping opinion than emotion and personal belief. In many ways, this is similar to Stephen Colbert's "truthiness"; essentially a rejection of Enlightenment ideas, dominant in the West since the 17th century, that valued experience and expertise, facts, the need for study, and respect for ideas. Science can be described as a search for the truth, and essential to that is the search for confirmable facts. This is essential for all scientists in order to validate their hypotheses. But what if it becomes possible to manipulate these facts, i.e. develop facts that are not actually real? For example, it's been recently shown that it is now possible to create real-seeming videos of things that never really happened. For example, I saw one, made by *Continued on Page 3*

IMPI 52 Symposium Continued

Muegge GmbH served as the Gold Sponsor, Ampleon and Richardson as Silver Sponsors and Ferrite Microwave Technologies as a Bronze Sponsor. Shanghai Ocean University served as the Proceeding sponsor and Ampleon is sponsoring the Student Travel Scholarships. Four \$500 student travel scholarships were awarded in May. The recipients of those awards were: Candice Ellison, Louisiana State University; Tesfaye Bedane, University of Salerno, YoonKi Hong, Washington State University and Mine Ozcelik, University of Munich.

A record number of exhibitors took part in IMPI 52: Ampleon, Dipolar, Ferrite Microwave Technologies, L3 Electron Devices, Macom, MKS, Muegge GmbH, NXP, PSC, SAIREM, SigmaPhi Electronics, Richardson Electronics, RFHIC, Rugged Monitoring and Wattsine.

During the closing ceremony on June 28th, the location for IMPI 53 was announced. The 53rd Annual Microwave Power Symposium (IMPI 53) will take place June 18-20, 2019 at Ceasars Palace in Las Vegas Nevada, USA. Dr. Graham Brodie of the University of Melbourne and Mr. Roger Williams of Ampleon will serve as the Co-chairmen on the Technical Program Committee. Dr. Ulrich Erle of Nestle will serve as the Chairman of the Food Science & Technology Program Committee.



IMPI's Fall 2018 Short Course: The Demographics Changing Today's Microwavable Foods Marketplace

Industry professionals will gather October 24-26, 2018 at Campbell's World Headquarters in Camden, New Jersey for the Fall Short Course. This is a must-attend event for everyone working with microwavable food products. The event will kick off with an optional Microwave 101: Fundamentals of Microwave Heating pre-Short Course being instructed by Bob Schiffmann. The Welcome Reception will follow on the evening of the 24th. The program runs October 25th and October 26th and will feature a series of keynote and oral presentations on a range of topics, such as: how to test dielectric properties, how to write safe preparation directions for microwavable foods, advances in microwave packaging, the use of microwave ovens in food service, etc. All sessions will take place at Campbell's World Headquarters. The hotel room block is just across the river in downtown Philadelphia at the Penns View Hotel. Transportation between Campbell's and the host hotel is included in your registration fee. **Registration is open and speakers are being added daily. Monitor www.impi.org for regular program updates, registration and hotel information.**

PRESIDENTS MESSAGE CONTINUED

a computer program, of a speech by Pres. Obama that he never gave. It was so realistic that, unless you knew that the speech had never been given, you could easily be fooled into thinking that it was a real speech. In another example, computer programs are now available which can render portraits of people who never existed. Add to this the deliberate misinformation being spread on social media by nefarious individuals and groups masquerading as legitimate entities, so the search for truth becomes harder every day.

A massive study done by MIT found that false stories reached 1500 people six times quicker, on average, than true stories; and that holds for science as well as other disciplines. A survey of 1330 people in England, published in the "European Journal of Cancer", found that, while correctly identifying smoking (both active & passive) and sun exposure, as being the leading causes of cancer, many incorrectly believed that such things as electromagnetic frequencies (35%), eating genetically modified foods (34%), microwave ovens (19%) and drinking from plastic bottles (15%) were also causes of cancer. And, because of the Internet and social media, these false concepts are amplified among the population. A 2015 article in The Atlantic Monthly titled "Americans Believe in Science, Just Not Its Findings", discusses the difference in the findings of scientific research and the public's belief on such things as evolution, climate change, genetically modified foods, and more. I can speak personally of the difficulty in trying to correct misperceptions about microwave ovens, foods, packaging, microwave heating, etc.; try as I may, it rarely changes minds, but occasionally it can happen.

IMPI's website's description of the Institute: "The International Microwave Power Institute (IMPI) was founded in 1966 to serve the information needs of all persons involved in non-communication applications of microwave and RF energy. IMPI's key strength is its diverse membership and interdisciplinary approach to issues of science, engineering, technology, education, and other disciplines related to microwave and RF applications. By combining science and engineering with practical development and marketing, the Institute has played, and continues to play, an important and unique role in advancing the use of microwave and RF energy in the laboratory, industrial processing, and the marketplace."

This year's IMPI Symposium in Long Beach California fulfilled this mission quite well, with the largest number of presentations and highest attendance that we've had in many years. The diversity of the presentations is an illustration of the serious search for scientific truth being carried out throughout the world. I wish we had a way of extending much of this information to consumers and non-microwave specialists, of replacing post-truth with facts, i.e. truth. Our sister organization, the Microwave Technology Association of the UK, does an excellent job of reaching consumers, largely through to the driving force of its president Jennipher Marshall-Jenkinson. (Some of you will remember her excellent cooking demonstration at last year's Symposium.) I wish we had a way of doing the same. Fighting the growth of post-truth is an uphill battle, and we must all do what we can!

Kudos to Molly, Ulrich and others for memorializing our time at IMPI 52 via photos you will see at the end of this newsletter!



Bob Schiffmann

Boxman and Yakovlev Installed as Fellows of IMPI



Congratulations to Dr. Raymond L. Boxman of Tel Aviv University (left) and Dr. Vadim V. Yakovlev of Worcester Polytechnic Institute (right) on becoming the 33rd and 34th Fellows of the International Microwave Power Institute. The two are shown above, receiving their plaques from IMPI's President, Bob Schiffmann, also a Fellow, on June 27th. Both Yakovlev and Boxman have a long history with IMPI and are experts in their given fields; [read the full press release here](#).

IMPI IS GOING TO LAS VEGAS!

Save the date for the 53rd Annual Microwave Power Symposium (IMPI 53), which will be held June 18-20, 2019 at Caesars Palace in Las Vegas, Nevada, USA. The Call for Papers will be released on September 1st.



IMPI 52 SYMPOSIUM – JUNE 26-28, 2018 – HILTON ONG BEACH, CALIFORNIA, USA





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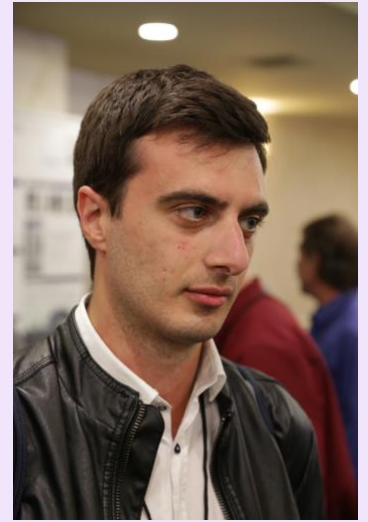
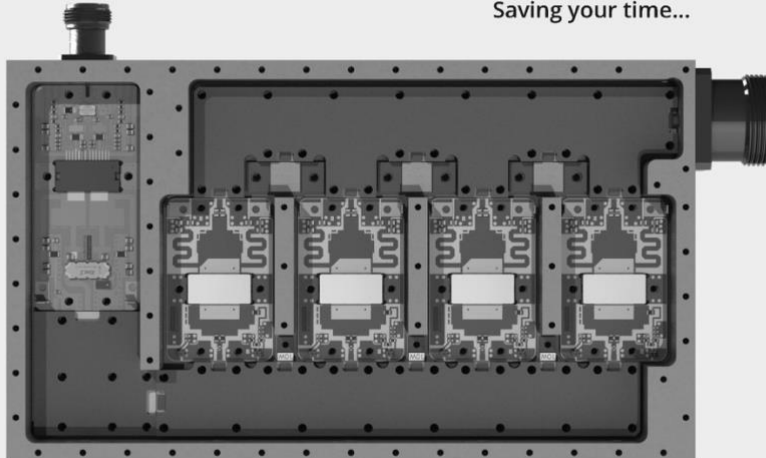


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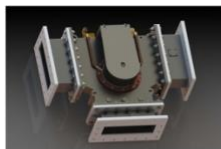
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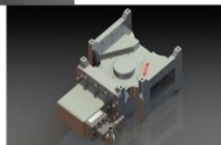
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NEWS FROM AROUND THE WEB

Public Consultation of the Draft ****ICNIRP Guidelines on Limiting Exposure to Time-Varying Electric, Magnetic and Electromagnetic Fields (100 kHz to 300 GHz) - until 9 October 2018**

Upon finalization of the Draft of the ICNIRP Guidelines on Limiting Exposure to Time-Varying Electric, Magnetic and Electromagnetic Fields (100 kHz to 300 GHz), ICNIRP would like to inform the Union Radio-Scientifique Internationale (URSI) about the launch of the public consultation and invite their experts to send their comments at their convenience.

To provide comments, please go to <https://www.icnirp.org/en/activities/public-consultation/index.html> and use the online form and template available there.

The Future of [Dinner in America](#)....

GE Launches New Microwave [Scan to Cook Technology](#)

A [Bacon Lovers Dream](#) in the UK

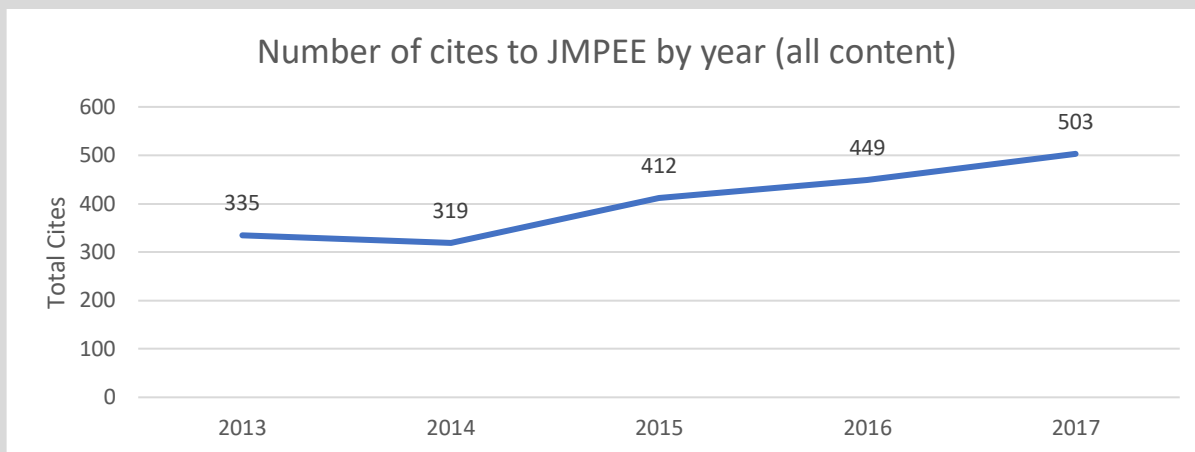
IMPI Elects New Board of Governors and Executive Committee Officers

During the annual General Membership Meeting on June 27th in Long Beach, California, IMPI elected 4 Voting Board Members. Bob Schiffmann, Graham Brodie, and Vadim Yakovlev were each re-elected for a 3-year term; John Mastela from Richardson Electronics, who has served as a Corresponding Board Member, was also elected to the Voting Board. Additionally, Jerome Czajkowski of Muegge-Gerling and Eric Brown of Conagra Brands were appointed to the Corresponding Board. The new Board convened following the General Membership Meeting and elected their Executive Committee for the next year. Those election results are as follows: President: Bob Schiffmann; Vice President: Ric Gonzalez; Secretary: Mark Watts and Treasurer: John F. Gerling. Pictured below is the Board of Governors during their June 25th Board Meeting.



THE JOURNAL OF MICROWAVE POWER & ELECTROMAGNETIC ENERGY (JMPEE)

JMPEE has had a stellar year under the leadership of Editor-in-Chief, Dr. Juan Aguilar of the University of Nuevo Leon.



- **Quality:** The rejection rate has increased from 26.7% to 47.9%
- **Speed:** Average time from submission to decision is under two months
- **Reach:** 73 different downloading countries in 2018, compared with 44 in 2017 (up 66%)
- **Impact:** JMPEE's CiteScore is up from 0.49 (2016) to 0.60 (2017). The 2017 Impact Factor for JMPEE remained at .575
- **Production:** Publication speed has increased by 24% - 2018 on 2017; articles now only take 25 days from entering production to online publication.

JMPEE access is a benefit available to all IMPI members. If you require assistance accessing your subscription please email: admin@impi.org

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